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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/884,084 | 06/20/2001 | Kensaku Komatsu | 209991US0 | 2344 |

22850 7590 03/14/2003

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1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

FORTUNA, ANA M

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1723

DATE MAILED: 03/14/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action

Application No.
09/884,084

Applicant(s)
Komatsu et al

Examiner
Ana Fortuna

Art Unit
1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED Feb 24, 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid the abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

THE PERIOD FOR REPLY [check only a) or b)]

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:

- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see NOTE below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: the limitations of particle cutt-off and permeate flow of the membrane are newly presented in the present amendment.

3. ☐ Applicant's reply has overcome the following rejection(s):

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because:

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____

Claim(s) objected to: _____

Claim(s) rejected: 1-5, 29, and 30

Claim(s) withdrawn from consideration: 6-28

8. ☐ The proposed drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

10. ☒ Other: see attached response to Applicant's arguments.

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DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 2/24/03 have been fully considered but they are not persuasive. The amendment filed the date above has not been entered. The claims remain rejected as rejected in paper No.9, further reasons for maintaining the rejection were also discussed in paper no.9 (Interview Summary Record). Parham et al's reference (5,258,149) teaches the method of "making microporous membrane" using silica particles as pore former or porogen, or filler, and further extracting the particles from the polymeric membrane, the term microporous membranes suggest that membranes having pore size between 0.02 to 10 microns (by definition of microporous membranes). Reference '149 teaches preferred pore size to be between 0.4 to 0.65, for producing membranes within the preferred range, particles with diameters equivalents to the pore diameter, which do not dissolved in the polymer or polymer mixture, and which are further extracted, must be used in the process of making the membrane. It would have been obvious to one skilled in the art to further extrapolated the membrane pore size by varying the particle (silica) size in the membrane mixture, to produce smaller or larger pore size. From the information in the patent one skilled in the art can recognize that the membrane having the pore size of 0.4 are produced from particles having the same particle size, and the same applies to the upper range, therefore, one skilled in the art at the time the invention was made can expect the formation of a membrane with pore size within the range of 1-20 microns by using particles, e.g. silica particles,

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having equivalent diameter. In re Luck, 177 USPQ 523(CCPA 1973). We would note that under section 103, not only are the teachings of the prior art taken into consideration, but also the level of ordinary skill in the pertinent art.

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana Fortuna whose telephone number is (703) 308-3857. The examiner can normally be reached on Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can be reached on (703) 308-0457. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for regular responses, and (703) 872-9311 for after finals.

Ana Fortuna

March 12, 2003



ANA FORTUNA
PRIMARY EXAMINER